

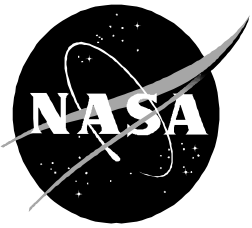
# **THIRD SESAAS YEAR 2000 STRATEGY ViTS**

Information Systems Services Office 6/23/97

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## **SUSTAINING ENGINEERING SUPPORT for AGENCYWIDE ADMINISTRATIVE SYSTEMS (SESAAS)**

**Third Year 2000 Strategy ViTS  
June 20, 1997**



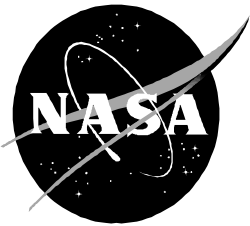
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## INTRODUCTION

**Purpose - Provide on-going status to the Agency on  
SESAAS Year 2000 conversion activities**



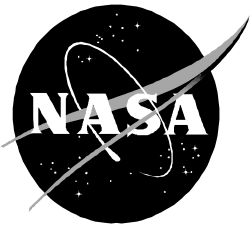
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## **Topics**

- ◆ **Updates to the Year 2000 System Release Schedule**
- ◆ **Testing Approach**
- ◆ **NEMS Y2K Status**
- ◆ **Issues and Concerns**



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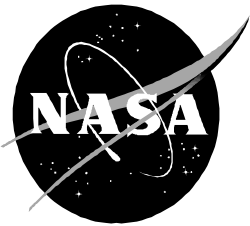
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## Target Year 2000 Software Release Schedule

SYSTEM	1/97	5	6	7	8	9	10	11	12	1/98	2	3	4	5	6	7	8	9
NPPS									D		S		R			P		
CAPPS											S		R			P		
NTDS									D		S		R			P		
NEMS			D								S	R			P			
NPDMS							D				S	R			P			
AMS									D		S	R			P			

**D - Y2K Conversion Doc.    S - SAG Y2K Product Upgrade    R - Release for Beta Testing    P - Prod Release**

**\*\*\* Releases may not include Y2K compliant interfaces to external systems**

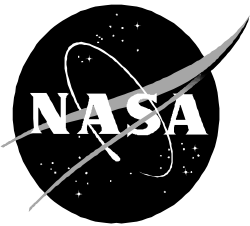


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## External Interfaces

SYSTEM	INTERFACE	CONTACTED	CHANGE REQUIRED	REL W/ SYSTEM
NPPS	OPM Macon	YES	UNKNOWN	
	Treasury	YES	UNKNOWN	
	SSA	YES	UNKNOWN	
	NFC	YES	UNKNOWN	
	NEBA	YES	UNKNOWN	
CAPPS	OPM	YES	UNKNOWN	
NTDS	CTDS	YES	UNKNOWN	
NSMS	DLSC	YES	NO	
	DAMES	YES	NO	
NPDMS	GSA	YES	YES	BEFORE
AMS	FACS	YES	YES	YES



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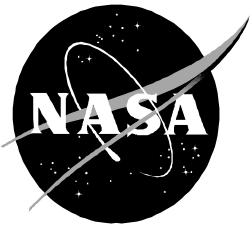
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# Testing Approach

### NACC Y2K Test Environment

- ◆ **Stand-alone Test Machine**
- ◆ **System Clock can be Advanced**
- ◆ **Will be Running OS/390 and SAG Y2K Compliant Products once Available**
- ◆ **January, 1998 Target Date**
- ◆ **Can be Reserved for Center Testing**
- ◆ **Will be Available Through Year 1999**

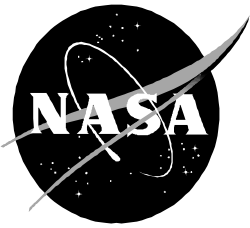


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## Testing Approach

### NACC Y2K Test Environment (cont.)

- ◆ Will be scheduled and used by the NACC, SAG Product and SESAAS Teams to Test:
  - SAG products with OS/390
  - Natural Date Differential (DD) Parameter  
(Compare results of DD Parameter use to actual system clock change)
  - Supernatural

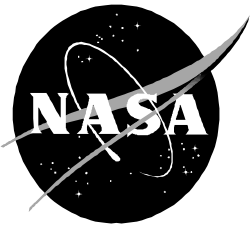


## Testing Approach

### DD Parameter Testing

- ◆ Identical tests will be performed with:
  - System Clock set to current date, and DD parameter advanced to a selected Year 2000 date
  - System Clock advanced to the same selected Year 2000 date, and DD parameter set to zero
- ◆ If results identical, all Y2K testing of NATURAL can take place in center LPARs
- ◆ If not, NACC test environment must be used



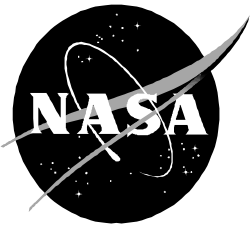


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## NEMS Y2K Status

### Analysis Summary

- ◆ 80 percent (43 of 54) of all date fields are used in calculations, compares, or as search criteria in Reads, Finds and Adhoc programs
- ◆ Easier to expand all 54 date fields
- ◆ Redefine date fields in PREDICT to lessen the number of program changes
- ◆ Build sub-programs to programmatically populate century portion instead of changing input screens

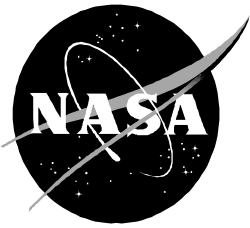


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## NEMS Y2K Status

### Technical Progress

- ◆ All PREDICT Numeric 6 date fields changed to Numeric 8
- ◆ Redefines added to all PREDICT Numeric 8 fields  
(element name -F2 (first 2 digits) -L6 (last 6 digits))
- ◆ Local date fields used in comparisons and computes expanded from Numeric 6 to Numeric 8



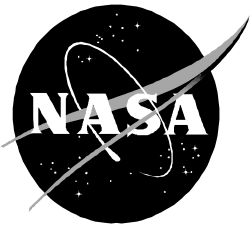
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## NEMS Y2K Status

### Technical Progress (cont.)

**Subprograms created to derive 2 digit century:**

- ◆ **Century Add - Used immediately after Input statements**
- ◆ **Century Update - Used immediately before all Store and Update statements**
- ◆ **If year greater than 25, century will be 19.**
- ◆ **Will not execute if entire date field is Null**

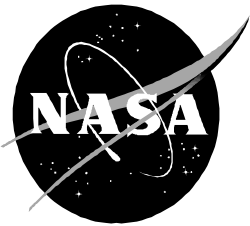


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## NEMS Y2K Status

### Technical Progress (cont.)

- ◆ Preliminary testing of the DD Parameter completed and was successful
  - ◆ Preliminary testing of Century sub-programs have been successful
  - ◆ Data matrix for PREDICT has been delivered to the Web page
- \*\*\*Centers should use this document to do impact analysis on site uniques**



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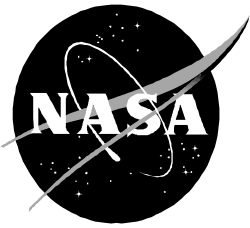
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# NEMS Y2K Status

### Technical Progress (cont.)

- ◆ **PREDICT files available to centers in July, 1997**
- ◆ **Data Conversion modules under development - available to centers in July, 1997**
- ◆ **Century sub-programs available to centers in July, 1997**



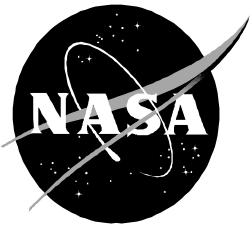
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## NEMS Y2K Status

### Technical Progress (cont.)

#### ◆ Lessons Learned:

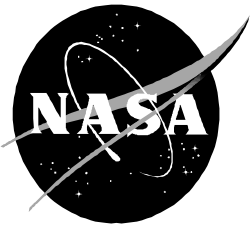
- **Redefined PREDICT date fields cannot be used in straight Report Mode of Natural**
- **Can be used with Modified Report Mode (Define Data statement at top of program)**
- **For programs using the new numeric 8 database fields, a numeric 8 field will be inserted in the local data area. The current numeric 6 field will become a redefinition of the new numeric 8 field**



## NEMS Y2K Status

### NEMS Testing Plan

- ◆ **Create defined test data transaction matrix for subsystems**
  - **Add transactions processed first**
  - **Change transactions manipulating Add data**
  - **Delete transactions manipulating add/change data**

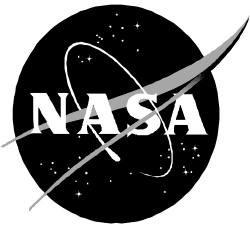


## NEMS Y2K Status

### NEMS Testing Plan (cont.)

- ◆ The following processes will be executed for each subset of data in matrix
  - Input defined data into current NEMS system
  - Execute reporting facility in current NEMS
  - Input defined data into converted NEMS using DD Parameter (simulating new century)
  - Execute reporting facility in converted NEMS using DD parameter (simulating new century)
  - Compare the two reports and check for variances.



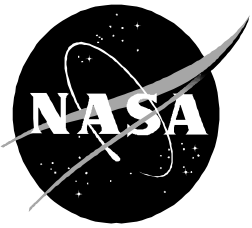


## NEMS Y2K Status

### NEMS Testing Plan (cont.)

#### ◆ Test data examples:

- Data will be tested in the current century (validate nothing was broken)
- Data spanning the turn of the century (Dec 31, 1999 to Jan 1, 2000)
- Data spanning year 2000 and 2001
- Data that encompasses leap year (Feb 29, 2000)



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# **Issues and Concerns**

- ◆ **No requirements for many of the external interfaces**
- ◆ **SESAAS schedule for Y2K compliance is contingent on the Software AG Y2K release schedules**